

**FILTER CIRCUIT FOR A BIT PUMP  
AND METHOD OF CONFIGURING THE SAME**

**ABSTRACT OF THE DISCLOSURE**

A filter circuit, method of configuring the filter circuit,  
5 and a bit pump and transceiver employing the circuit and method.  
In one embodiment, the filter circuit includes a noise prediction  
equalizer that generates a noise prediction equalizer coefficient  
during activation of the bit pump to reduce an intersymbol  
interference associated with a receive signal propagating along a  
10 receive path of the bit pump. The filter circuit also includes a  
decision feedback equalizer that generates a decision feedback  
equalizer coefficient during the activation of the bit pump to  
reduce the intersymbol interference associated with the receive  
signal. The noise prediction equalizer is concatenated with the  
15 decision feedback equalizer during showtime of the bit pump to form  
a precoder associated with a transmit path of the bit pump.